NOTES ON THE GENERA *POTAMOPYRGUS* AND *LYRODES*

BY J. P. E. MORRISON[1]

The genus *Potamopyrgus* was created by Stimpson in 1865[2] for *Melania corolla* Gould, of New Zealand. *Huttonia* Johnson 1891,[3] with the same type species, is necessarily an absolute synonym. The "spines" present on these shells are solely epidermal fringes. The animals of dried specimens (U.S.N.M. Cat. No. 126677) of another member of this group, *P. antipodarum* Gray, were examined after softening in water. The verge of *antipodarum* is long, geniculate, and simple; its shape is that of a long narrow U; the distal half folded forward dextrally along the proximal half. The eyes are on prominent tubercles, as stated by Stimpson in the original description of the genus. This species is oviparous; presumably the other New Zealand forms reproduce likewise.

In 1865 Stimpson regarded the American forms as distinct and designated *P. auberiana* D'Orb., as type of the genus Paludestrina D'Orb., in the mistaken belief that the description in Sagra's Cuba[4] represented its earliest publication.

Lyrodes Doering 1884,[5] with *L. guaraniticus* as type, is the earliest valid name available. *Pyrgophorus* Ancey 1888,[6] with *Pyrgulopsis spinosa* C. & P. as type, is probably completely synonymous. The "spines," when present, are filled by shell material, in the shape of laminiform tubercles. Examination of dried specimens of three forms of this group: *crystallina* Pfr. from St. Croix (U.S.N.M. Cat. No. 472697); *jamaicensis* C.B.Ad. from Jamaica (U.S.N.M. Cat. No. 66416); and *spinosa* C. & P. from Brownsville, Texas (U.S.N.M. Cat. No. 217054) has shown that the verge is complex, in agreement with that described and

[1] Published by permission of the Secretary of the Smithsonian Institution.

[2] Am. Journ. Conch., I, 1865, p. 53.

[3] Proc. Royal Soc. Tasmania for 1890, p. 90 (1891).

[4] D'Orbigny in Sagra's Cuba, Moll., II, (1841), p. 8.

[5] Bol. Acad. Nac. Ciencas Cordoba (Rep. Argentina), VII, 1884, pp. 461–3, fig. 2.

[6] Bull. Soc. Mal. de France, V, 1888, p. 192.

figured by H. B. Baker[7] for *L. parvula* (Guild.) from Curaçao. The four of six appendages are arranged in a pattern differing from that known for *Littoridina* Souleyet.[8] The eyes are seen as imbedded in the outer base of the tentacles, not on tubercles. All the known members of the group are ovo-viviparous; some females in the St. Croix material had the uterus packed with twenty to thirty shelled embryonic young. These are visible through the translucent shell of the adult female (if cleaned). In fact, all the females of this lot were separated from the males by observation of the *whitish* uterus within the last whorl.

Softening of "dried-in" animals by five to ten minutes brisk boiling in water in a test tube is successful enough to examine superficial or gross anatomical features, whenever the animals have not been destroyed by moulding, decay, or the feeding of dermestids.

To contrast the genera:

Potamopyrgus Stimpson 1865.	*Lyrodes* Doering 1884.
Epidermal spines on shell.	Calcareous spines on shell.
Verge long, geniculate, and simple.	Verge briefly geniculate, and complex (appendages).
Eyes on prominent tubercles.	Eyes not on tubercles.
Oviparous.	Ovo-viviparous.
Range: New Zealand.	Range: East American.

NOTE ON THE GENUS *LUCINA* IN THE WESTERN ATLANTIC

BY RICHARD A. McLEAN

Lucina, in the strict sense, contains only two species in the western Atlantic, these are *L. pensylvanica* L., the genotype, and *L. sombrerensis* Dall, a small deep-water form.

Dall (1901, p. 807–808) lists four species and places them in the subgenus *Here* Gabb 1866, but as Stewart[1] has pointed out this name was proposed for a species that is somewhat different

[7] Occ. papers, Mus. Zool., U. of Mich., No. 210, p. 32, pl. 27, fig. 3 (1930).

[8] Voyage, etc., La Bonite, Zool., II, p. 565 (1852).

[1] Stewart, R. B. 1930. Gabb's California Cretaceous and Tertiary Type Lamellibranchs. Special Publ. No. 3, Acad. Nat. Sci. Philadelphia, p. 175–180.